

SURREBUTTAL EXHIBIT JRB-2 (REFERENCED DISCOVERY RESPONSES) 1  
VOTE SOLAR  
DOCKET NO. 2018-319-E

**Duke Energy Carolinas' Response to  
Vote Solar's First Set of Written Discovery Request  
Pursuant to S.C. Code Ann. § 58-4-55  
Docket No. 2018-319-E  
Related to Hager Testimony  
Date of Request: January 14, 2019  
Date of Response: January 24, 2019**

☐ CONFIDENTIAL

☒ NOT CONFIDENTIAL

The attached response to First Data Request #1-4, was provided to me by the following individual: Kaari K. Beard, Rates & Regulatory Manager, Rate Case Planning & Execution, and was provided to Vote Solar under my supervision.

Heather Shirley Smith  
Deputy General Counsel  
Duke Energy Carolinas, LLC

SURREBUTTAL EXHIBIT JRB-2 (REFERENCED DISCOVERY RESPONSES) 2  
VOTE SOLAR  
DOCKET NO. 2018-319-E

**DUKE ENERGY CAROLINAS**

**Request:**

1-4 Please refer to Hager Direct, p. 15, lines 16-17.

(a) Please define the term “low use customer”.

(b) Please provide any analysis the Company has conducted supporting this definition and the associated workpapers in electronic spreadsheet format with all formulas and linkages intact.

**Response:**

In response to (a), Witness Hager’s use of the term “low use customer” was meant to be general in nature. Witness Hager did not intend to imply that there were specific usage thresholds associated with this term.

In response to (b), the Company has no analysis to support a specific definition.

SURREBUTTAL EXHIBIT JRB-2 (REFERENCED DISCOVERY RESPONSES) 3  
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The attached response to First Data Request #1-18, was provided to me by the following individual: Kaari K. Beard, Rates & Regulatory Manager, Rate Case Planning & Execution, and was provided to Vote Solar under my supervision.

Heather Shirley Smith  
Deputy General Counsel  
Duke Energy Carolinas, LLC

**DUKE ENERGY CAROLINAS**

**Request:**

1-18 On page 12 of Witness Hager's testimony, she testifies that "the Company has also identified a portion of the costs for distribution lines, poles, and transformers ... to be allocated based on customer factors."

(a) Please provide complete and detailed documentation of the input data, methods, and results of the Minimum System analyses used to determine the customer-related components of the Company's investments in:

- i. Primary poles.
- ii. Secondary poles.
- iii. Primary overhead conductors.
- iv. Secondary overhead conductors.
- v. Primary underground lines.
- vi. Secondary underground lines.
- vii. Line transformers.

(b) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive the customer-related portion of costs recorded in FERC Accounts 364-368.

**Response:**

In response to (a), please find attached 'VS DR 1-18 DEC\_MinSys\_1217.xlsm' which shows the development of DEC's minimum system amounts for each relevant FERC account. The "SCMinSys" worksheet provides the final calculations. Also note that the calculations are performed at the FERC account level and subsequently allocated to Primary/Secondary classifications.

In response to (b), the attached workbook provides the calculations as well as data source documents.

[VS DR 1-18 DEC\_MinSys\_1217.xlsm]

SURREBUTTAL EXHIBIT JRB-2 (REFERENCED DISCOVERY RESPONSES) 5  
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The attached response to First Data Request #1-20, was provided to me by the following individual: Kaari K. Beard, Rates & Regulatory Manager, Rate Case Planning & Execution, and was provided to Vote Solar under my supervision.

Heather Shirley Smith  
Deputy General Counsel  
Duke Energy Carolinas, LLC

**DUKE ENERGY CAROLINAS**

**Request:**

1-20 On page 15 of Witness Hager's testimony, she testifies that "Witness Pirro relied upon costs allocated as being customer-related in the Cost of Service Study in developing his recommendation regarding the Basic Facilities Charge."

(a) Please provide an electronic spreadsheet version, with all cell formulas and file linkages intact, of the unit cost study relied on by Company witness Michael J. Pirro to develop his recommendation regarding the residential Basic Facilities Charge.

(b) Please provide an electronic spreadsheet version, with all cell formulas and file linkages intact, of the unit cost study associated with a version of the Company's cost of service study which classifies 100% of the costs recorded in FERC Accounts 364 through 368 as demand-related (i.e., relies on the Basic Customer method to classify distribution plant costs.)

**Response:**

In response to (a), please see attached file 'VS DR 1-20 DEC\_Unit Cost Study.xlsm' which shows the unit cost study relied on by Company Witness Michael J. Pirro to develop his recommendation regarding the residential Basic Facilities Charge.

In response to (b), please see attached file 'VS DR 1-20 DEC\_Unit Cost Study-no Min Sys.xlsm' which shows the unit cost study associated with a version of the Company's cost of service study which classifies 100% of the costs recorded in FERC Accounts 364 through 368 as demand-related.

[VS DR 1-20 DEC\_Unit Cost Study.xlsm]

[VS DR 1-20 DEC\_Unit Cost Study-no Min Sys.xlsm]

SURREBUTTAL EXHIBIT JRB-2 (REFERENCED DISCOVERY RESPONSES) 7  
VOTE SOLAR  
DOCKET NO. 2018-319-E

**Duke Energy Carolinas' Response to  
Vote Solar's Eighth Set of Written Discovery Request  
Pursuant to S.C. Code Ann. § 58-4-55  
Docket No. 2018-319-E  
Related to Pirro's Rebuttal Testimony  
Date of Request: March 13, 2019  
Date of Response: March 15, 2019**

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The attached response to Eighth Data Request #8-1, was provided to me by the following individual: Michael J. Pirro, Director, Rates & Regulatory Planning, and was provided to Vote Solar under my supervision.

Heather Shirley Smith  
Deputy General Counsel  
Duke Energy Carolinas, LLC

**DUKE ENERGY CAROLINAS**

**Request:**

- 8-1 Please refer to Pirro Rebuttal, p. 7.
- (a) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive all data inputs to the figure positioned between lines 2 and 3.
  - (b) Please reconcile the Company's response to Vote Solar Data Request 3-2 with the figure depicted on Pirro Rebuttal, p. 7.
  - (c) Please provide the distribution of low-income consumer bills (household income <\$30,000) by monthly usage and rate schedule, including at a minimum schedules RS, RE, and RT.

**Response:**

(a) See the attached file 'Vote Solar Data Request 8-1.xlsx'. Customer Account number and other identifying information has been removed.

['Vote Solar Data Request 8-1.xlsx']

(b) Company billing records do not contain the data that was requested in Vote Solar 3-2. The Company was able to use data from the Acxiom database to provide some representative information around usage at various income levels.

(c) The query did not contain rate code specifics for the residential class of customers. The majority of customers would be under rate schedule RS and RE.



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The attached response to Eighth Data Request #8-3, was provided to me by the following individual: Michael J. Pirro, Director, Rates & Regulatory Planning, and was provided to Vote Solar under my supervision.

Heather Shirley Smith  
Deputy General Counsel  
Duke Energy Carolinas, LLC

**DUKE ENERGY CAROLINAS**

**Request:**

- 8-3 On page 10 of Witness Pirro's Rebuttal Testimony. Pirro states that "The Company should revise its Rate Schedule RS to include a demand component rate to recover all non-minimum distribution costs."
- (a) Please explain why demand charges are recommended for Schedule RS customers but not Schedule RE customers.
- (b) Please provide a list of all examples of all mandatory (or default schedule) residential demand charges that Mr. Pirro is aware of. Please provide the applicable state, utility, rate schedule identifier, and a link to the tariff.

**Response:**

- (a) If the Commission decides that it is appropriate to recover demand-related cost via a demand rate, the demand recovery component would apply to all residential schedules.
- (b) North Carolina - Duke Energy Carolinas - Schedule RT Residential Service, Time of Use - <https://www.duke-energy.com/ /media/pdfs/for-your-home/rates/electric-nc/ncschedulesrt.pdf?la=en>

North Carolina - Duke Energy Progress - Residential Service Time-Of-Use Schedule R-TOUD-53 - <https://www.duke-energy.com/ /media/pdfs/for-your-home/rates/electric-nc/r2ncschedulesrtouddep.pdf?la=en>

South Carolina - Duke Energy Carolinas - Schedule RT Residential Service, Time-Of-Use - <https://www.duke-energy.com/ /media/pdfs/for-your-home/rates/electric-sc/scschedulesrt.pdf?la=en>

South Carolina - Duke Energy Progress - Residential Service Time-Of-Use Schedule R-TOUD-52 - <https://www.duke-energy.com/ /media/pdfs/for-your-home/rates/electric-sc/r2scschedulesrtoud.pdf?la=en>

[Attached PDFs were provided for each of these rate schedules]